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Golder Associates
CONSULTING GEOTECHNICAL ENGINEERS

February 19, 1975

The Saratoga Associates
The Arcade
Saratoga Springs, New York 12866

Attn: Mr. Vincent J. Moore

Re: Geotechnical Services
Park Plaza Project
Boston, Massachusetts

Gentlemen:

In accordance with your letter of February 11, 1975 and discussions with Mr. John Hester we are pleased to submit our proposal for providing geotechnical services on the Park Plaza project. These services would include (1) a review of subsurface conditions in the area, (2) an analysis of the effects which these might have on various development programs for the area and (3) an analysis of the effects which the combination of the subsurface conditions and the various development programs might have on adjacent property and facilities. The results of this work would be discussed with you and then presented in the form of a brief report.

The review of the subsurface conditions would be based entirely on presently available information. The sources of this information would be our files, published data, the Boston Redevelopment Agency and the U.S. Geological Survey. Particular attention would be directed to groundwater conditions on both the Park Plaza and in surrounding areas. It is understood that the various development programs to be considered would be defined in meetings with you and, possibly, the B.R.A.. Our analyses would then be conducted on the basis of our experience in the Boston area. A tentative outline of our report on the results of our work is appended to this proposal for your consideration and comment.

For the scope and intensity of work as described above and as discussed with Mr. Hester we estimate that 3 to 4 days of work by the undersigned would be involved including an allowance of 1 to 2 days for meetings. Our normal charges for a principal

GOLDER, GASS ASSOCIATES INC. • 1033 MASSACHUSETTS AVENUE, CAMBRIDGE, MASSACHUSETTS 02138, U.S.A. • (617) 868-1420
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are at the rate of $375.00 per day. Therefore, we estimate that the cost of the work as described would be $1,125 to $1,500.

We hope you will find this proposal satisfactory and look forward to working with you.

Very truly yours,

GOLDER, GASS ASSOCIATES, INC.

A. Allen Gass

A. Allen Gass

AAG:bp

Enc.

APPENDIX A

Tentative Outline of Proposed Report on Geotechnical Considerations for Park Plaza

1. Introduction
    a. Purpose
    b. Method and Sources
2. Subsurface Conditions
    a. Soils
    b. Bedrock
    c. Groundwater
3. Design Considerations
    a. Definition of Development Programs
    b. Foundation Types
    c. Control of Groundwater
4. Construction Considerations
    a. Excavation
    b. Support of Excavations
    c. Control of Groundwater
5. Effects on Adjacent Property
    a. Due to Excavation
    b. Due to Installation of Foundations
    c. Due to Control of Groundwater

Golder Associates

consulting geotechnical engineers

Golder Associates
consulting geotechnical engineers

History of Firm:

Following over two decades of civil engineering practice in England Dr. H. Q. Golder formed his own private consulting practice. He lectured in Engineering Geology at Harvard University and then emigrated to Canada. The firm of H. Q. Golder & Associates Ltd. was founded in Toronto in 1960 with the addition of several engineers who were experienced in the field of soil mechanics and foundation engineering. The increasing association of the firm with large bridge and road projects in British Columbia, and The Hugh Keenleyside Dam on the Columbia, led to the opening of an office in Vancouver in 1963. Other offices in Ontario were opened in London, Ottawa, and Windsor by 1968. The firm of Golder, Gass Associates Inc. was formed in 1968 at Boston in order to provide independent consulting geotechnical engineering services to various projects in the Eastern United States. Due to the firm's increasing association with geotechnical problems of the mining industry, the firm of Golder Moss Pty Ltd. was formed in conjunction with Brickell, Moss & Partners to provide complete geotechnical services in Australia.

In this edition of their brochure, the principals of Golder Associates record their joint indebtedness to the vision, imagination, ability and vigour of the late Professor L. G. Soderman, who was a founding member of the firm and who died in 1969 in his 42nd year.

H. Q. Golder & Associates Ltd.

3151 Wharton Way
Mississauga (Toronto), Ontario, Canada
Telephone (416) 625-0094
Telex 06-961136 Cable: Cansol Toronto

196 Bronson Avenue,
Ottawa, Ontario, Canada
Telephone (613) 235-9698

747 Hyde Park Road,
London 73, Ontario
Telephone (519) 471-9600

2479 Howard Avenue,
Windsor 14, Ontario, Canada
Telephone (519) 254-8241

Golder, Brawner & Associates Ltd.

224 West 8th Avenue,
Vancouver 10, B.C., Canada
Telephone (604) 879-9266
Telex 04-508800

Golder, Gass Associates, Inc.

1033 Massachusetts Avenue,
Cambridge, Mass. 02138, U.S.A.
Telephone (617) 868-1420

Golder Moss Pty. Ltd.

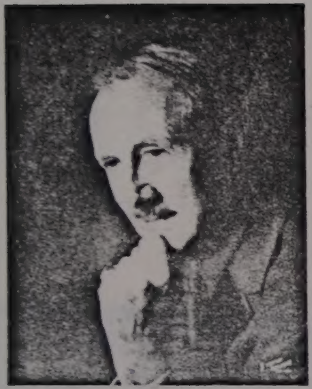
Suite 12, 67 Queens Road,
Melbourne, Vic. 3004, Australia
Telephone 51-8635
Cable: Goldermoss, Melbourne

7 West Street,
North Sydney, NSW 2060, Australia
Telephone 92-4475

Principals

The Golder organization provides a consulting engineering service in the geotechnical field, specializing in the fields of soil and rock mechanics.

The complete staff numbers over 100 and includes professional personnel trained in soil and foundation engineering, rock mechanics and engineering geology, and the general fields of civil and mining engineering.

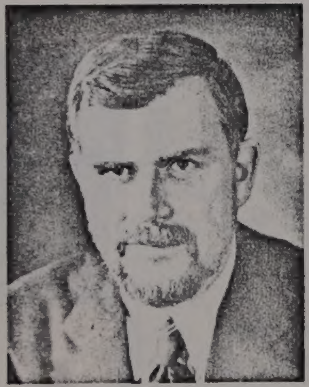


Dr. H. Q. Golder

V. Milligan

J. L. Seychuk

C. O. Brawner



A. A. Gass

D. L. Townsend

N. R. McCammon

ASSOCIATES

F. J. Heffernan
Ottawa

R. M. Wilson
Vancouver

B. E. W. Dowse
London

D. B. Campbell
Vancouver

J. B. Davis
Toronto

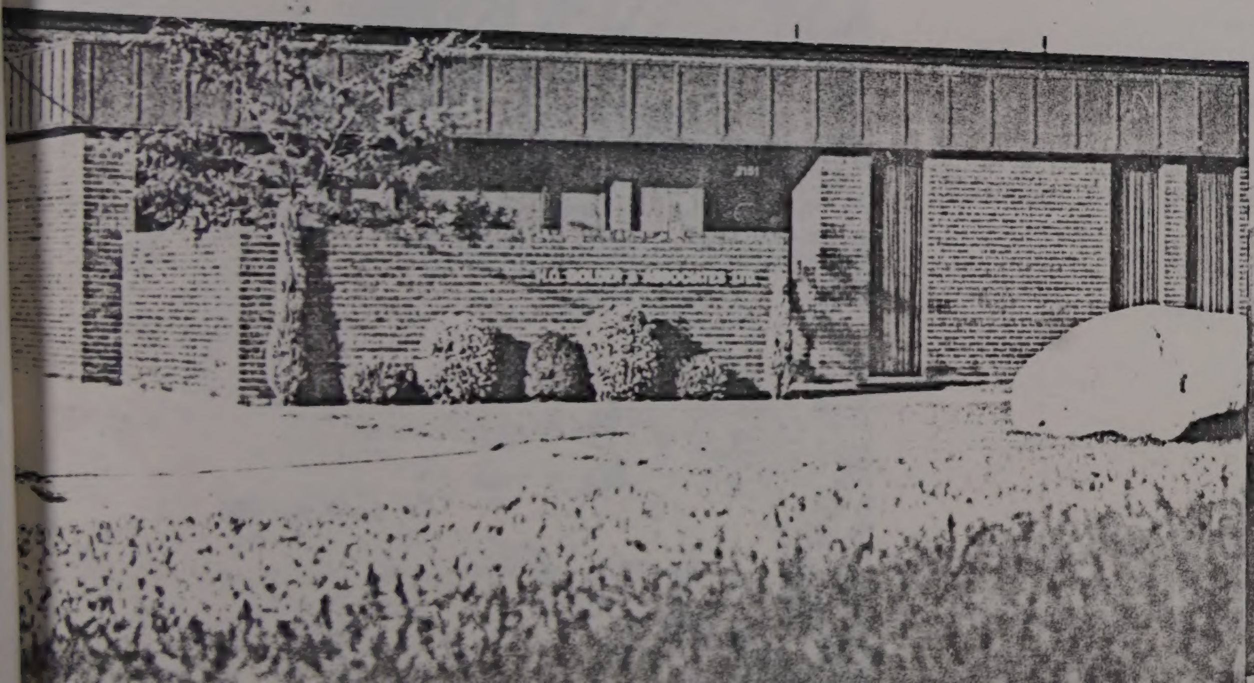
D. L. Pentz
Vancouver

J. F. Capps
Windsor

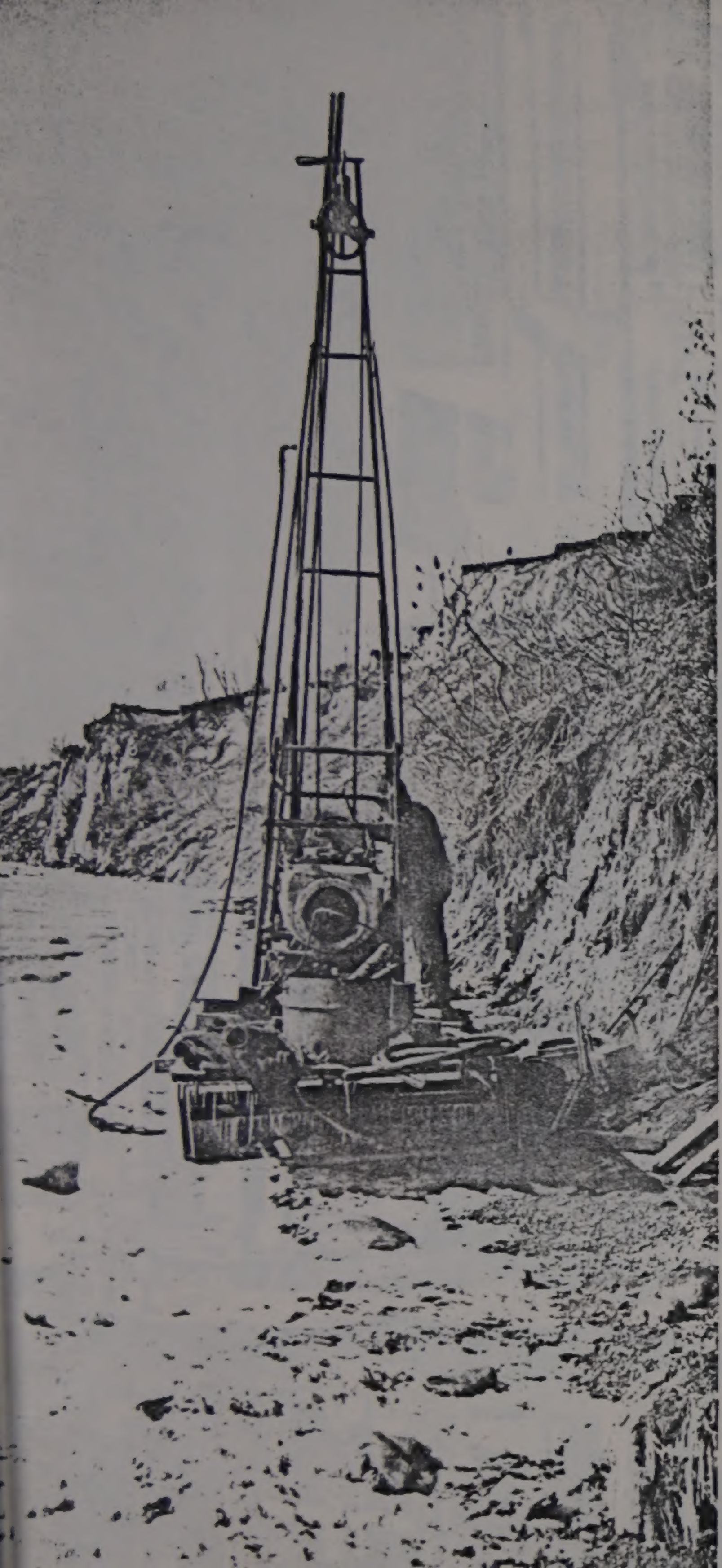
Offices

Each office of the Golder organization is equipped to provide a complete service to the local clients. A staff of experienced senior engineers, geologists, and field engineers, assisted by technicians and draughtsmen is capable of providing complete geotechnical services including all necessary laboratory testing. The principal offices in Toronto and Vancouver also provide central facilities for specialized soil and rock mechanics tests and field testing and instrumentation. The principal offices are interconnected by Telex for the convenient handling of national and international geotechnical problems.

Toronto



Vancouver



Services

"Before you invest — investigate" is a good business motto which is appropriate to geotechnical engineering. The Golder organization provides a complete consulting service for all stages of soil and rock mechanics problems, including

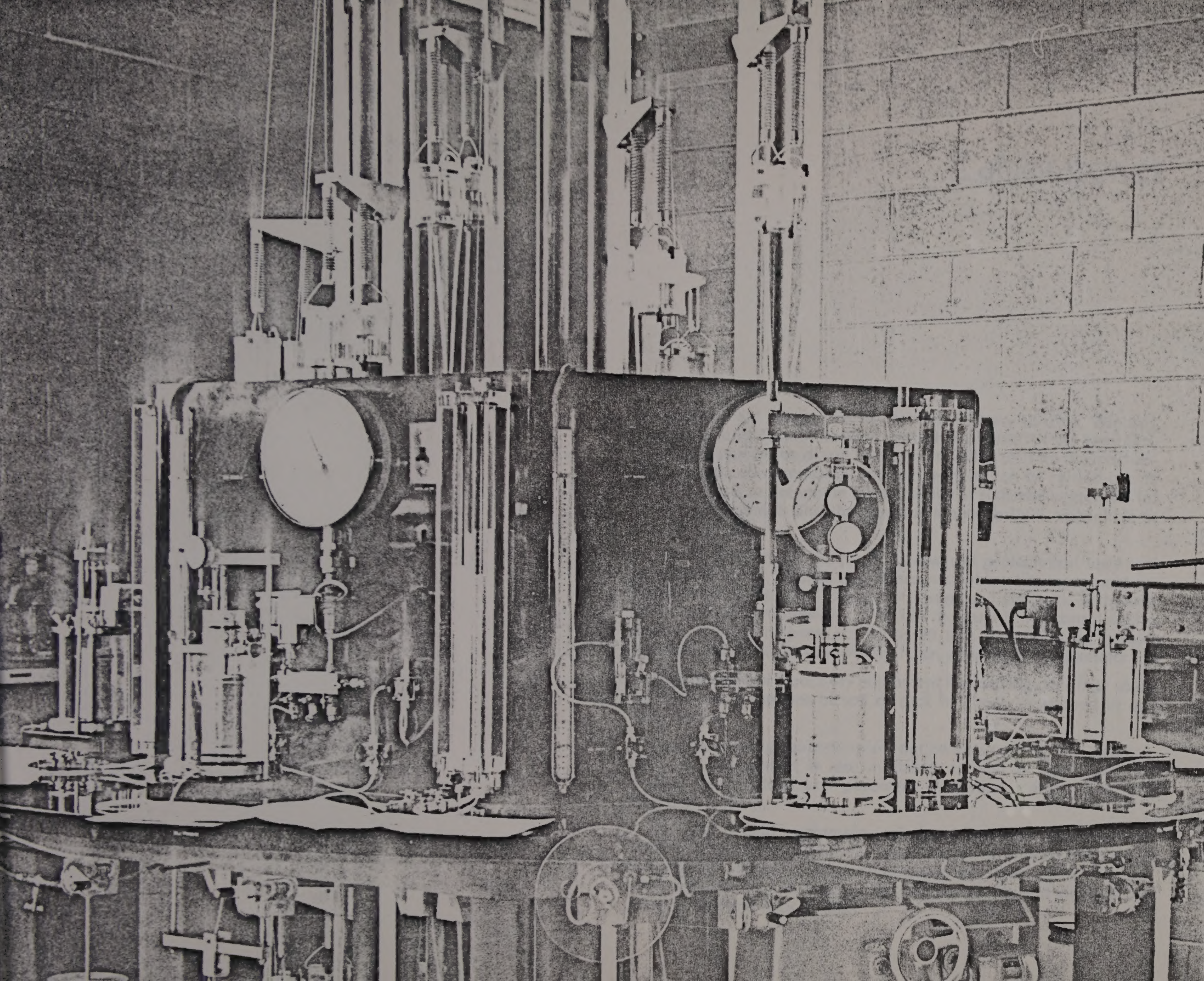
- geotechnical site evaluation
- air photo interpretation
- detailed site investigations
- large scale field measurements
- design recommendations
- construction control and instrumentation.

These complete geotechnical services have been provided for a wide variety of projects, including:

- foundation design for buildings and bridges
- earth and rock fill dams
- wharves, docks, and bulk handling facilities
- open pit mine slopes
- sewage lagoons and sanitary landfills
- highway and railway transportation systems
- tunnels and subway systems.

Some examples of these services are included on the following pages. In addition to these projects, Golder Associates has provided geotechnical advice on projects involving grouting, dewatering, materials testing, construction inspection, deep and braced excavations, landslides, and offshore marine work.

To supplement their consulting engineering services, the firm will arrange for specialized drilling and sampling equipment to be provided by approved drilling contractors for site investigations and field studies.



Laboratories

Laboratories are maintained in Toronto, Ottawa, London, Windsor, Vancouver and Boston. Routine geotechnical tests for the identification and classification of soil and rock, as well as tests for the mechanical strength, compressibility and permeability can be carried out. In addition, tests to determine the suitability of soils and aggregates for roadway pavements and the construction of earthfill embankments are performed.

When necessary for the project, advanced geotechnical tests may be carried out in Toronto and Vancouver where the equipment includes triaxial apparatus capable of testing soil and rock in drained or undrained compression up to 120 lb. per sq. in., consolidation presses capable of pressures up to 80 tons per sq. ft. on normal samples and up to 10 tons per sq. ft. on samples 12 in. diameter.

Portable field or laboratory equipment for carrying out direct shear tests on block samples of soil or rock has been developed in our laboratories.

Materials testing equipment for routine tests on soil, rock, cement, concrete and asphalt is also available, as well as equipment for nuclear density tests and pavement evaluation studies using the Benkelman Beam.

Specialized field equipment includes a borehole periscope and borehole camera for 'down the hole' viewing or photography, slope indicators to measure the lateral deformation of soil strata at depth, and pressuremeters to measure the compressibility and elastic properties of soil and rock in-situ.

Transportation

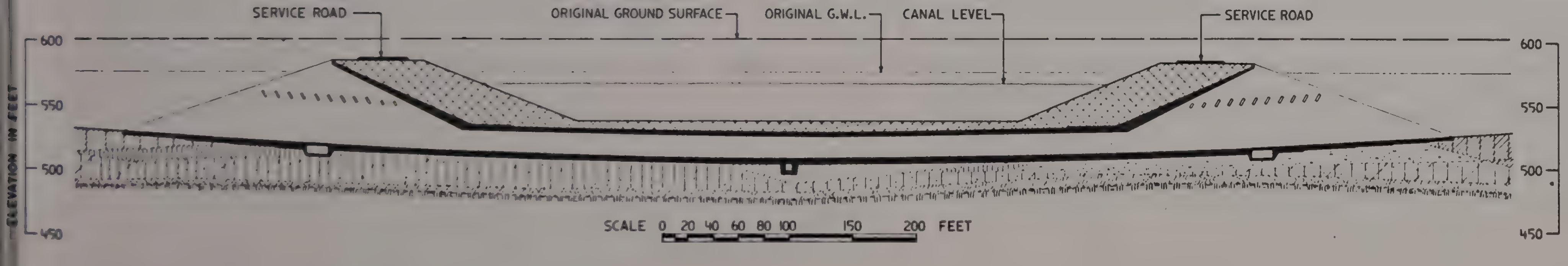
Bridges

The increasing demand for improved transportation facilities has required the construction of a substantial number of major and minor bridges during the past decade. The Golder organization has provided geotechnical services for a wide variety of structures including the Port Mann, Alexandra and Needles Bridges in British Columbia, the MacDonald-Cartier Bridge at Ottawa, the Rosedale Valley subway bridge and the interchange structures for highways 400 and 401 in Toronto. In addition geotechnical services have been provided to both Canadian major railway companies and to regional rail carriers in Ontario, British Columbia and the Yukon.

Highways

The continued need for development roads in remote areas, as well as the need for urban freeways to reduce traffic congestion has provided an opportunity for our staff to give service on the Chedoke Expressway (Hamilton), Don Valley Parkway (Toronto), and the Queensway (Ottawa). In addition, routine pavement evaluation studies have been carried out on numerous municipal and county roads. Overseas, the Golder organization has completed major geotechnical studies for highways in Guyana, Paraguay, Ethiopia, Kuwait and South Africa, as well as special studies for work in Thailand, Iran, and Spain.

Toronto Transit Commission — Rosedale Valley Subway Bridge.
Client: De Leuw, Cather & Company of Canada Limited.


SERVICE ROAD
ORIGINAL GROUND SURFACE
ORIGINAL G.W.L.
CANAL LEVEL
SERVICE ROAD
600
550
500
450
ELEVATION IN FEET
SCALE 0 20 40 60 80 100 150 200 FEET

Transportation

Tunnels

In recent years, there has been an increase in 'cut-and-cover' construction for major urban subway systems and for crossings of major waterways. Golder Associates have been extensively involved in such major projects as the Toronto Subway system, as well as highway tunnels for the reconstruction and widening of the Welland Canal. Geotechnical work for feasibility studies of tunnels in Toronto harbour and under the Niagara River at Buffalo has also been carried out. Rock tunneling for major transportation routes in British Columbia have used geotechnical data from our studies.

Marine and Harbour Works

Geotechnical work associated with marine and harbour work and the construction of causeways and breakwaters requires an assessment of the soft ocean bottom sediments and the forces that may be exerted upon wharves and piling. Projects include dock extensions at Skagway (Alaska), Vancouver and the Fraser River Delta in British Columbia, marine works at Windsor, Hamilton and Toronto, Ontario; Sorel, Gros Cacouna and Baie Comeau, Quebec, and overseas projects In Haiti, Kuwait and St. Lucia. Golder Associates have also been associated with the construction of causeways across lakes and marine inlets in Northern Ontario, Newfoundland, and British Columbia.

East Main Street Tunnel under Welland Canal
Client: Ministry of Transportation and Communications.

Building Foundations

"On account of the fact that there is no glory attached to the foundations, and that the sources of success or failure are hidden deep in the ground, building foundations have always been treated as stepchildren; and their acts of revenge for the lack of attention can be very embarrassing." (Karl Terzaghi)

Modern buildings increasingly impose heavier foundation loadings on soil and rock, demand deeper excavations for underground parking and services, and are often built in conditions such that settlement of the structure may be a problem. Golder Associates have been associated with a variety of foundation problems including the Boston Public Library and the Federal Reserve Bank in Boston, observation towers at Niagara Falls, major hospitals in Toronto, London, and Windsor together with many academic buildings for universities at Boston, Princeton, Syracuse, Toronto, London, Waterloo and Vancouver.

Increasingly, the construction of new buildings requires the underpinning of adjacent older structures, and our firm has provided geotechnical services in Toronto, Ottawa, Vancouver, London (England) and Melbourne (Australia).

In cases where the foundation of the structure has proven to be inadequate, the wide experience of Golder Associates has been used to recommend remedial measures necessary for the reconstruction of structures in Toronto, Ottawa, Thunder Bay and elsewhere.

stigation of collapse of grain elevator,
Arthur, Ontario.
nt: *Sir Alexander Gibb & Partners.*

Industrial Plants

The Capital spending requirements for major industrial concerns require that the construction period should be as short as possible, and often involve design modifications during actual building. Golder Associates have provided services for the initial investigation and the on-site supervision of construction of the foundations for major industrial plants including ore processing plants near Ignace, Ontario and at Sorel, Quebec, a cement plant at Kamloops, British Columbia and lumber kilns at Chemainus, British Columbia. Major investigations have also been carried out for a thermal power station at Nanticoke, Ontario, and nuclear research establishments in Manitoba and in the Ottawa Valley. Special advice has been provided for a major power plant in Florida, liquid propane storage tanks, and blast furnace foundations in Hamilton and Sorel.

All offices of Golder Associates provide geotechnical advice on the foundations for light industrial buildings where often economies can be achieved by the use of shallow foundations on adequate mat foundations or granular rafts.

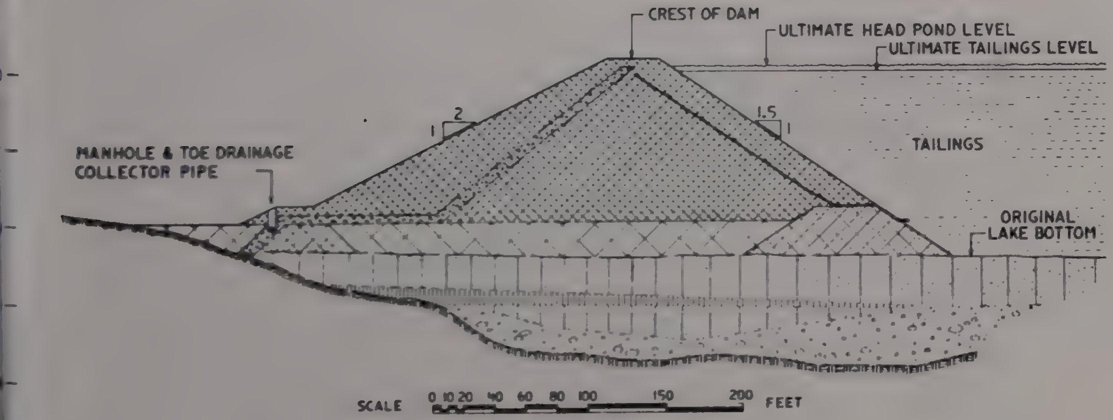
Recreational facilities such as skating rinks require detailed investigations to minimize the damage that can occur from excessive frost penetration and Golder Associates have provided advice on numerous such arenas.

Lafarge Cement Plant, Kamloops, B.C.
Client: Lafarge Cement of North America Ltd.

The Mining Industry

Golder Associates have participated as geotechnical consultants in a variety of mining projects which have included the investigation and design of tailings dams, studies of open pit stability problems, townsite services, location studies for road and rail transportation to and from the mine, groundwater problems and dewatering, as well as building foundations. In many cases, the tailings dam is built as a stage construction program which involves the supervision of construction by engineers of our staff. A total of over 35 tailings dams, varying in height from 30 feet to a possible 600 feet ultimate height, have been investigated.

Projects in Canada have included mines on Vancouver Island, and in the Similkameen River, Highland Creek, and East Kootenay regions of British Columbia, within the Canadian Shield near Sturgeon Lake and Elliott Lake, and within the Labrador Trough and Appalachian Highlands of Quebec. Overseas projects have included mines in the Philippines, Bolivia, Australia, Ireland, and Morocco.



Long Lake Tailings Dam, Elliot Lake, Ontario.
Client: Denison Mines Ltd.

Slope Stability

Natural Slopes

Construction excavation or blasting, dumping of waste material at the top of a slope, river erosion or high groundwater levels and other natural geological factors can often lead to the instability of slopes. In most cases, a careful geotechnical examination is necessary so that the remedial measures can be designed to prevent future occurrences. Golder Associates have participated in studies of landslides at Sailor Bar, Drynoch, and along the Kicking Horse Pass in British Columbia, as well as for studies in conservation areas of Ontario. In several cases, special studies have led to the development of municipal zoning regulations in areas of potential slope danger.

Open Pit Slopes

Slight increases in the slope angle for open pit mine slopes can lead to substantial savings in the cost of excavation, but the slopes should not be so steep as to cause a movement which could close the operation. Geological mapping of joints and bedding planes by experienced personnel can be collated and analyzed by computer to develop the most economical pit slopes for various stages of each mining operation. Golder Associates have carried out open pit stability studies in soil and rock for major mining projects on the Queen Charlotte Islands, in the Cassiar Mountains, the Interior Plateau and elsewhere in British Columbia, projects in the Notre Dame Mountains of Quebec, several quarries and pits in Southern Ontario, as well as overseas.

w slide at Terrace, B.C.
ent: *B.C. Department of Highways.*

Dams

Since its inception, the firm of Golder Associates has developed extensive experience on large and small dams for hydro-electric, flood storage, conservation and recreational purposes. The firm has participated in a major geotechnical capacity on the Keenleyside Dam at Arrow Lakes, British Columbia, and as an adviser on questions affecting the safety of the W. A. C. Bennett Dam on the Peace River. In addition, Golder Associates are participating with Surveyer, Nenniger and Chênevert of Montreal on studies for over 25 hydro-electric power projects in the valleys of the Upper, Lower, and Eastern Acheloos, and the Aoos Rivers in Greece.

In addition to the hydro-electric work, Golder Associates have participated in geotechnical studies for several large and small dams for various conservation authorities in Ontario, including dams along the Main and East Branches of the Humber River, and dams within the Grand River and Upper Thames Conservation areas. Excluding tailings dams the firm has carried out work on nearly 40 dams in Canada.

ugh Keenleyside Dam, Arrow Lakes, B.C.
ient: *C.B.A. Engineering Ltd.*

Environmental Projects

Increasing concern for the preservation of the environment has led to the design and construction of numerous major engineering projects such as water treatment plants and sewage plants.

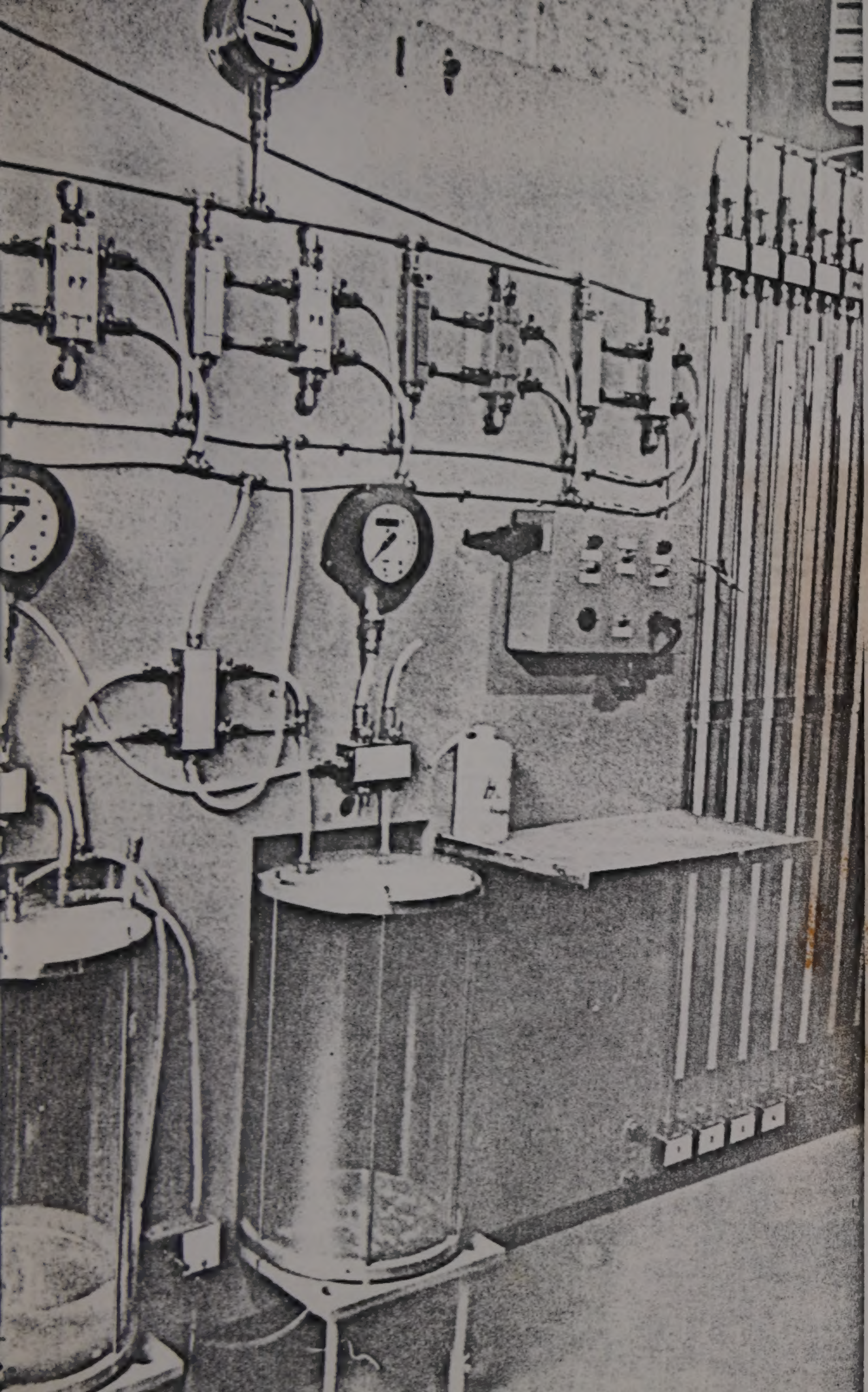
Golder Associates has participated as geotechnical consultants on a wide variety of such projects including the tunnels for the Mid-Toronto Interceptor Sewer, water intake structures and tunnel at Nanticoke, Ontario, the West Trunk Sanitary Sewer (Mississauga), the Lake Erie Water Intake and Treatment Plant serving communities near St. Thomas, Ontario, the Greenway Pollution Control Centre in London, Ontario, and additional projects in British Columbia including the Surrey Trunk Sewer and services to Simon Fraser University.

Smaller municipalities often consider it more economical to construct sewage lagoons or sanitary landfills, and Golder Associates has carried out investigations for such projects in over 40 municipalities in southern Ontario, British Columbia and elsewhere.

Cross City Water Main, London, Ontario.
Client: James F. MacLaren Limited.

Arctic Engineering

For the past decade engineers with Golder Associates have been involved with geotechnical engineering problems associated with arctic projects. Field work and foundation design recommendations have been carried out in connection with radio towers near Inuvik, offshore oil field development in the Beaufort Sea, and slope stability studies along the banks of the Athabaska River. Within the Yukon, major geotechnical investigations have been carried out to investigate slope stability problems on the Yukon River, as well as in connection with railway and highway transportation problems. Geotechnical investigations have also been completed in the vicinity of James Bay in connection with the development of open pit mines, and for the foundations for local school buildings founded in areas of discontinuous permafrost.



Instrumentation

Because of inherent local variation in natural soil and rock deposits, safe and economical solutions to many engineering projects often depend upon observations and measurements which are made during construction of the work. In many cases, the small samples obtained for laboratory testing may not be representative of actual field conditions and the cost of obtaining a large number of laboratory samples can be excessive. For these reasons, the staff at Golder Associates have participated in numerous large scale field tests and field instrumentation programs in addition to the usual routine field sampling techniques. Field projects have included large scale direct shear tests in connection with a thermal generating station near Nanticoke, goundwater control during the construction of tunnels at the Welland Canal, slope indicator measurements for wharves, deep excavations and ore piles, in situ jacking tests in rock, pressure packer tests to determine the field permeability of both soils and rock, and Benkelman Beam studies for the evaluation of pavements.

Air Photo Interpretation

The examination and interpretation of aerial photographs is used as a routine part of many geotechnical studies prior to the development of detailed field examination. In many cases, the overall geotechnical problems may be anticipated in advance and to a sufficient degree of accuracy for preliminary and feasibility studies.

A partial list of our clients includes the following :—

neering • Anstey & Gray • Arcon Engineering Consultants • Ardo Consultants Corporation • Argor Explorations • Ascon Construction • Atlas Consolidated Mining • Atomic Energy of Canada • The Austin C
: Radio of Canada • Avoca Mines • H. A. Babcock & Company • Barnett & McQueen • Basarab Construction • K. J. Beamish Construction • Bechtel Corporation • Behre-Dolbear Inc. • Beaver Construction •
n • Fred A. Bell & Associates • Richard Bennett Developments • Bethlehem Copper • B & D Concrete Products • Bell Canada • Bennington Developments • B.I.B. Construction • Billings Engineering • Bird Co
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s • Carter Construction • Carter-Fraser • Carlberg, Jackson & Partners • Carleton Board of Education • Carroll, Hatch & Associates • Cassiar Asbestos • Capital Regional District • Catalytic Construction • C.B
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Edgar A. Cross & Associates • Cross Supplies & Paving • Crysler, Davis & Jorgensen • Craigmont Mines • Crown Zellerbach • Craig & Kohler • Edward J. Cuhaci • Cumming-Cockburn & Associates • Cunningha
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anada Department of Public Works • Canada Department of Justice • Department of Highways (Saskatchewan) • Department of Transportation & Communications (Ontario) • Canada Department of Transport • E
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ber Company • First Florida Building • First Line Contracting • Fisher, Tedman & Fisher • Finamore Construction • Falgar Construction • Fletcher-Clare Company • Flintkote of Canada • Flour Utah • Flows
g • Forest City Terrazzo Tile • Ford Motor Co. • Forest Valley Products • Foundation Company • Fording Coal • Fownes Construction • Framat Construction • Franki Canada Limited • Fraser-Brace Enginee
er Board • Freebore Leaseholds • Frid Construction • Ft. Langley Aggregate • Franklin Fence & Furniture • J. A. Gable • John Gaffney Construction • Galt Parks & Recreation Department • Gar-Ley Construc
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cot Mines • Glimco Ltd. • Godfrey & Tanz • Goldlist Construction • Gombas Developments • Goodkey Weedmark & Associates • Gortdrum Mines • Gower & Yeung • Granby — Granisle Copper • Grosvenor —
akes Forgings • Graham, Berman & Associates • Graham & Graham • Great American Insurance • The Great Atlantic & Pacific Tea Company • J. Fred Green • Green, Blankstein, Russell Associates •
& Associates • Gregg & Moore • J. T. Gregg & Associates • Donald C. Griffin • Gurr & Setchell • Guyana Graphics • Gutteridge, Haskins & Davey • Gulf Realty • W. R. Grace & Co. • Haas, Reubsam L
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ley Iron Pty. • Hansed-Allott Construction • Highland Country Club • Heper Holdings • Hildebrand Construction • Helmer and Tutton • Hogarth Galvanizing • Holderbank Technical Services • Holton Heigh
usen, Thompson, LaBramboise & Mallette • Homark Real Estate • Homer & Rogers, Ashley & Myer • Hong Kong Government • Horn McAnuff & Hastings • Horton Steel Works • J. G. Hreno • Howard B. H
umphries & Sons • Humble Oil • Humpty Dumpty Potato Chip • Hunter, Crockford & Scobbie • Huron County • Hydro-Electric Power Commission • Hydrology Consultants • I.E.C.O. — San Francisco • Imperial
t Test Lab • Inducon Engineering • International Society of SMFE • I.P.E.C. Engineering • Iron Ore of Canada • Janin Construction • A. Johnson (Canada) Ltd. • F. E. Johnston Drilling • Johnson Su
& Associates • M. V. Jones & Associates • Philip Carter Johnson & Patrick Coles • Earl Jones & Sons • Johnson-McWhinnie • William A. E. R. Kachmaryk • Kaiser Engineers • Kappele, Wright & MacLeod •
• Kaiser Coal • Kamkotia-Buricam • Kelsey-Hayes Canada • Kenton Investment and Development • Keystone Contractors • Kennco Stikine • Kennedy & McLeod • N. B. Kelsey Associates • Peter Kiewit • K
g • M. H. Kilpatrick & Associates • King Paving • Kipling Plaza • Kibbrook Motor Hotel • G. V. Kleinfeldt & Associates • R. M. Kostuch & Associates • Kranz Investments • Kuwait, Ministry of Public Works •
, General Contractor • LaFontaine, Cowie, Buratto & Associates • Lake Asbestos Mining • Lakeshore Expressway • Lake Ontario Cement • Lanaar Construction • Lansdowne & Ross • Laughlin, Wyllie & U
g and Son • Larson & Epp Industries • LaFarge Cement • Lake Asbestos Mines • Lambton County • N. D. Lea & Associates • Leathorne Construction • J. D. Lee Engineering • Lee Elken & Becksted •
n • Lenkurt Electric • A. E. LePage • Lepanto Consolidated Mining • Lenford Construction • Lithwick, Lambert, Sim & Johnston • Arthur D. Little • Logan Contracting • London Development Engineering • L
ssociation • London Life Insurance • London Tamblyn Consultants • W. P. London & Partners • Louisville Raceway Corp. • Robert J. Love & Partners • Lornex Mining • Lockhead Petroleum • London Precast Prod
wimming Pools • London Township • M. Loeb Limited • G. E. Lutman • James S. F. Ma & Associates • Maksymec & Associates • Malabou Developments • Malahide Developments • F. C. Maltman & Co. • M
on • Marani Rounthwaite & Dick • Marathon Realty Company • Marentette Bros. • Maritime Power • Markus & Son • Marshall, Macklin & Monaghan • John Maryon & Partners • V. K. Mason Construction • M
on • Mason-Kiewit • Matthews Group • Mattagami Lake Mines • Matthews Concrete • C. H. Maartman Ltd. • Marine Drive Golf Club • Marineland Investments • Marinduque Mines • J. Macciochi & Sons • Mar
Meredith, Davidson & Bennett • Merlin Acceptance & Realty • Le Messurier Associates • Metro Reads (Toronto) • Metro Works Dept. (Toronto) • Metro Separate School Board (Toronto) • Metro Toronto
on • Meiklejohn, Gower, Fulker • Mid-Delaware Construction • Milton Brick • Mini-Mix of London • Minis & Thomas • Peter T. Mitches & Associates • Ken Milnes • Ministry of Transport, England • Mo
, Burgess & Huggins • Mobile Mix Concrete • M. J. Mol Construction • Monteith-Ingram Engineering • Monteith- McGrath Limited • Morden & Helwig • More Custom Homes • Molybdenum Corporation • F. W. Mc
n-Knudsen • Morton Chemical • Murphy, Schuller, Green & Martin • Ronald E. Murphy • Municipality of Burnaby • Municipality of Delta • Mustang Resources • McCall Contractors • McElhanney Surveying & Eng
V. McKay Construction • MacIntosh Paving • James F. MacLaren • A. M. MacKay & Associates • R. W. McKay Construction • Robert McAlpine • McCall Contractors • McConnell-Jackson • McCormick Ran
• W. A. McDougall • D. D. McGeorge • McKay-Cocker Construction • McLean-Foster Construction • McNamara Corporation • McNamara Construction • McNamara Engineering • McNamara International • N
ature's Health Products • N.D.I. (Madrid) • New England Mutual Life Insurance • New Mt. Sinai Hospital • Netupsky Engineering • Nisbet, Letham Engineering • Nicola Valley Sawmills • Nordark Ho
Corp • North American Elevators • North End Contractors • North County Construction Northland Engineering • Northumberland Strait Consultants • Northern Power and Transportation • Northern Construc
Pulp and Paper • Novel Construction • Northwest Territories • Oak Lane Investments • Oakville Power Boat Club • Oak Island Developments • M. J. O'Brien • Ojibway Division Morton Chemical • Olym
Olund Construction • Ontario Housing Corporation • The Ontario Jockey Club • Ontario Northland Railway • Ontario Water Resources Commission • Ontario Student Housing Corporation • Orchardview De
Orland Construction • Ottawa Public School Board • Otonabee Region Conservation Authority • Owen Sound School Board • Palace Pier Amusements • Parker & Hastings • John B. Parkin & Associates •
ed Native Coop • Par Construction • C. G. Parker & Associates • Peacock Contracting • Peelcrest Investments • P. Pennington • Perini Ltd. • L. Perl Holdings • Permond Development • Peto Associ
an • Phelps Dodge Corp • Philip Carter Johnson • Philips, Planning & Engineering • Phillips, Barratt, Hillier, Jones & Partners • W. C. Pietz Limited • Pigott Construction • C. A. Pitts & Co. • Polymer Corp
quitlam Nurseries • Port Simpson • Portland Cement Association • Pre Con Limited • Pre Con Murray • Proctor & Redfern • Project Planning & Associates • Proctor, Redfern, Bousfield & Bacon • Public U
n, London • Public Utilities Commission, Ridgetown • Public Utilities Commission, Strathroy • Public Utilities Commission, Woodstock • Pyramid Contractors • Allan C. Randles • W. S. Rankin & Associates •
on • Tony Rea & Co. • J. S. Redpath • Redfern Construction Company • Regional Municipality of Niagara Public Works Department • Reid, Crowther & Partners • Reid's Aggregate • Resources Enginee
ies & Christofferson • Reeves, MacDonald Mines • Regional Municipality of Ottawa Carleton • Reid Collins • Red-D Mix Concrete • Ricenberg Developments • J. L. Richards & Associates • Riddle, Connor,
idzek Contracting • Rio Algom Mines • Rhone & Iredale • Rio Tinto Zinc • Richman Investments • Robertson Yates Corp. • Robco Developments • Robin Hood Flour Mills • J. Robollard • Ronark Develo
on • Ron Engineering & Construction • Roscoe Metal • B. M. Ross & Associates • Rounthwaite & Associates • Robertson, Kolbeins, Teevan & Gallaher • Russell Armstrong Associates • Russell Construc
herford • Ruxley Heights Ltd. • Ruliff Grass Construction • Ryan Builders Supplies • Rydall Brick & Tile • Ryder Truck Rental • Ryancrete Sterling Products • St. Catharines General Hospital • St. Lawrence S
• St. Lawrence Cement • St. Mary's School Board • St. Clair Roofing & Siding • Salvation Army • Sanco Construction • Sarnia Heating & Electric • Sayers & Associates • Scholastic Publications • Scrivener Engin
ger Construction • Scholefield Management • Scott and Furnadjieff • G. M. Sernas • Servant Electric • Setchell & McKinnon • Don Shaver Construction • Archibald Shaw & Partners • Shawinigan Enginee
wnsend • Shebron Holdings • Shell Canada • Shenkman Properties • Sherman & Lepper • Sherman Sand and Gravel • Sherman Williams • Sherwood Forest Development • Shore & Moffat and Partners •
ces • Shortreed, Benoit & Fournier • Sifton Construction • Sifton Properties • Simon Fraser University Similkameen Mining • Shaughnessy Golf and Country Club • Silverquick Mines • Siskind, Taggart & Crom
ter, Searle & Associates • John W. Smith Developments • John W. Smith Construction • Soil Stabilizer Ltd. • Sorenson, Holtshousen, Thompason, LaFramboise & Mallette • Southcrest Estates • Southwest Mid
ntre • Southwinds Sand and Gravel • Squamish Mills • G. W. Spratt • South Windsor Development • Speedy Muffler King • N. J. Spivak • Mandel Sprachman • A. M. Spriet & Associates • Stebco Developm
pany of Canada • Steinbergs • Stevenson, Hardtke • Stewart & Hinan • Stone & Webster • Strahl Construction • L. R. Staples Engineering • Star Shipyards • State Electricity Commission — Australia • H
& Associates • M. S. Sullivan • Sun Oil • Sundel Estates • Sverdrup & Parcel • Swan Wooster Engineering • Sydenham Valley Conservation Authority • Tillman & Lamb • J. M. Takacs Co. • Tally-Ho Drive Ins •
ssociates • Doug Tarry • Taylor-Woodrow • Tahsis Company • Templeton Engineering • William Teron & Associates • Terratech Ltd. • Texaco Canada • Terra Engineering • Terrace Municipality • Terrace
hames Valley Brick & Bldg. Products • Thomson Rodgers • Thornbury High School • Thompson, Berwick, Pratt & Partners • M. S. Thompson & Associates • J. P. Thompson & Associates • Titan Cartage •
& Associates • Toroak Constuction • Toronto Township • Toronto Transit Commission • Total Engineering • Totten, Sims, Hubicki Associates • Toronto Dominion Bank • Towland Construction • Town of C
wn of Georgetown • Town of Mattawa • Town of Mississauga • Town of Oakville • Town of Perth • Town of Port Credit • Town of Smiths Falls • Town of Strathroy • Town of Timmins • Township of Cha
of Chesterville • Township of Saltfleet • Tran Steel • Triton Alliance • Trans Mountain Pipeline • Transcon Car Wash • Travellers Insurance • Underwriters Adj. Bureau • Underwood McLellan & Assoc
McKinley, Cameron, Wilson • Upecon Engineering • U.P.A.C.E. Limited • Ursell Associates • Urban Planning Associates • Gordon Urwin Ltd. • Utah Construction and Mining • United Counties of Presc